

Appl. No. 10/737,228
Amdt. dated 10/25/2005
Reply to Office Action of 10/7/2005

Amendments to the Claims:

Please amend the claims as follows:

1. (Original): A closed-cell, HFC-245fa blown rigid polyurethane foam with hydrophobic liquid components for being mixed and foamed in the presence of water resulting in a closed-cell foaming mass with a lifting power proportional to the lifting power achieved in a dry condition, comprising:

- (a) an isocyanate (A) component for altering finished foam properties;
- (b) a polyol (B) component, comprising:
 - (i) a modifier for the promotion of alcohol hydrogen; and
 - (ii) a polyether polyol with a functionality of about 2.0 to about 6.0 and a molecular weight of about 400 to about 1000.

2. (Original): The closed-cell, HFC-245fa blown rigid polyurethane foam according to claim 1, wherein the isocyanate (A) component contains additives selected from the group consisting of halogenated esters, halogenated phosphate esters, and plasticizers for altering finished foam properties.

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3. (Original): The closed-cell, HFC-245fa blown rigid polyurethane foam according to claim 1, wherein the modifier is selected from the group consisting of glycerin, short chain glycols, chlorinated phosphate, benzoate, dibasic esters, water, silicone surfactants, acidic buffering agents, tertiary amine, and metallic catalysts.

4. (Original): The closed-cell, HFC-245fa blown rigid polyurethane foam according to claim 1, wherein the polyol (B) component further comprises a polyester polyol.

5. (Original): A closed-cell, HFC-245fa blown rigid polyurethane foam with hydrophobic liquid components for being mixed and foamed in the presence of water resulting in a closed-cell foaming mass with a lifting power proportional to the lifting power achieved in a dry condition, comprising:

- (a) an isocyanate (A) component for altering finished foam properties;
- (b) a polyol (B) component, comprising:
 - (i) a modifier for the promotion of alcohol hydrogen; and
 - (ii) a polyester polyol with a functionality of about 1.5 to about 3.0 and a molecular weight of about 250 to about 1250.

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6. (Original): The closed-cell, HFC-245fa blown rigid polyurethane foam according to claim 1, wherein the isocyanate (A) component contains additives selected from the group consisting of halogenated esters, halogenated phosphate esters, and plasticizers for altering finished foam properties.

7. (Original): The closed-cell, HFC-245fa blown rigid polyurethane foam according to claim 1, wherein the modifier is selected from the group consisting of glycerin, short chain glycols, chlorinated phosphate, benzoate, dibasic esters, water, silicone surfactants, acidic buffering agents, tertiary amine, and metallic catalysts.

8. (Original): The closed-cell, HFC-245fa blown rigid polyurethane foam according to claim 1, wherein the polyol (B) component further comprises a polyether polyol.

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9. (Withdrawn): A method for injecting a closed-cell, HFC-245fa blown rigid polyurethane foam into a void beneath a floor or slab, comprising the steps of:

- (a) forming an injection hole in a floor or slab to be lifted;
- (b) feeding an isocyanate (A) component and a polyol (B) component separately into a metering unit whereby the isocyanate (A) component and the polyol (B) component remain in an unmixed state;
- (c) separately pumping the isocyanate (A) component and the polyol (B) component to a two component mixing head;
- (d) extending an exit nozzle of the mixing head into the injection hole; and
- (e) injecting a metered amount of isocyanate (A) component and polyol (B) component into a void beneath the slab causing a reaction between the isocyanate (A) component and the polyol (B) component whereby the reaction forms a foaming mass which lifts and supports the slab.